

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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Peachtree City, GA 30269

Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: STREETWORKS

Report Number: P1458027

Luminaire Tested: GLAN-SB2A-940-U-T2LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1458027
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB2A-940-U-T2LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 2xLight Square PACKAGE 90CRI 4000K FIXTURE w/ TYPE II LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (52) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

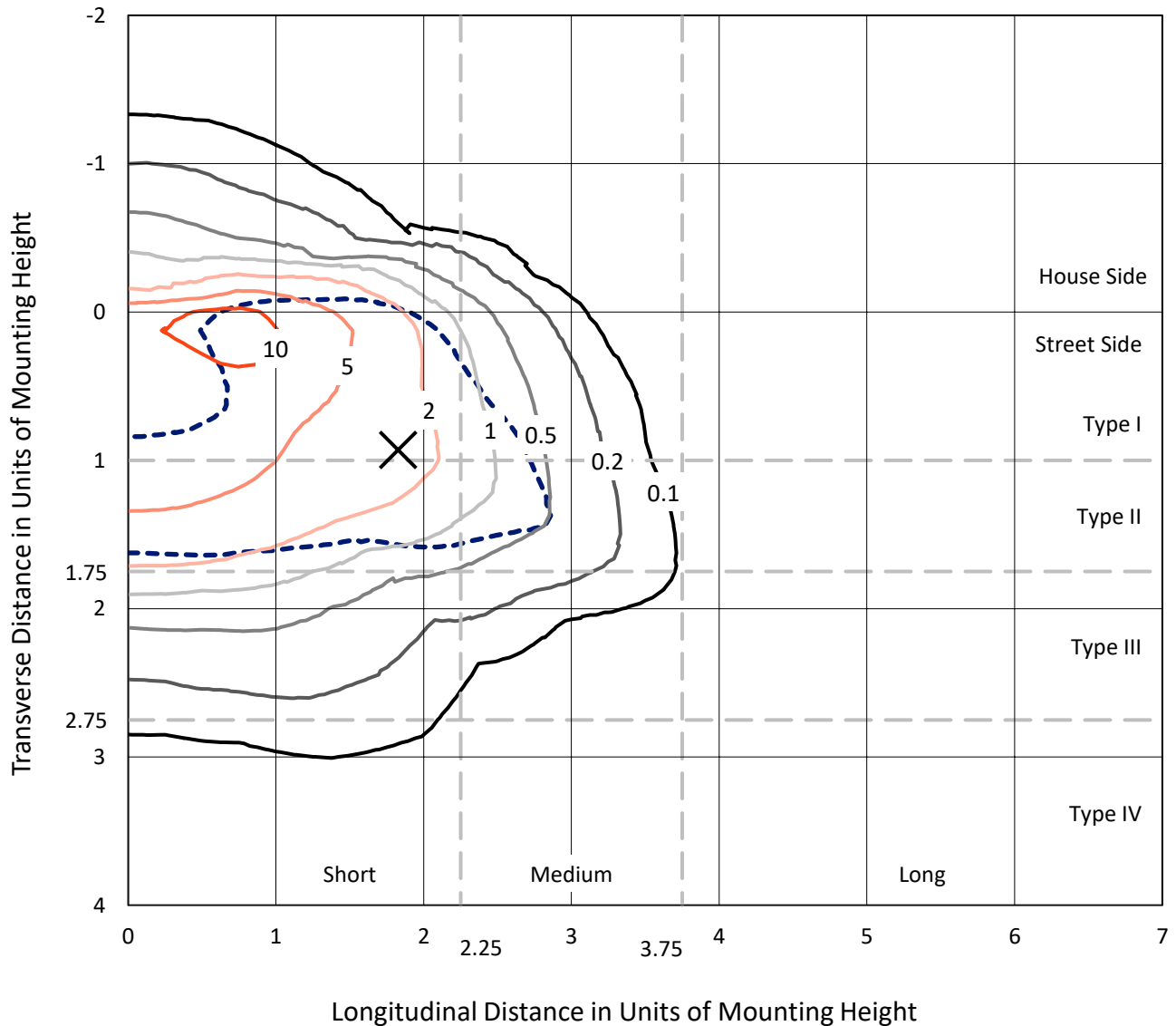
Lumens per Lamp: N/A
Luminaire Lumens: 4709.1 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 57.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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 CATALOG NUMBER: GLAN-SB2A-940-U-T2LG-HSS

Iso-Footcandle Lines of Horizontal Illumination

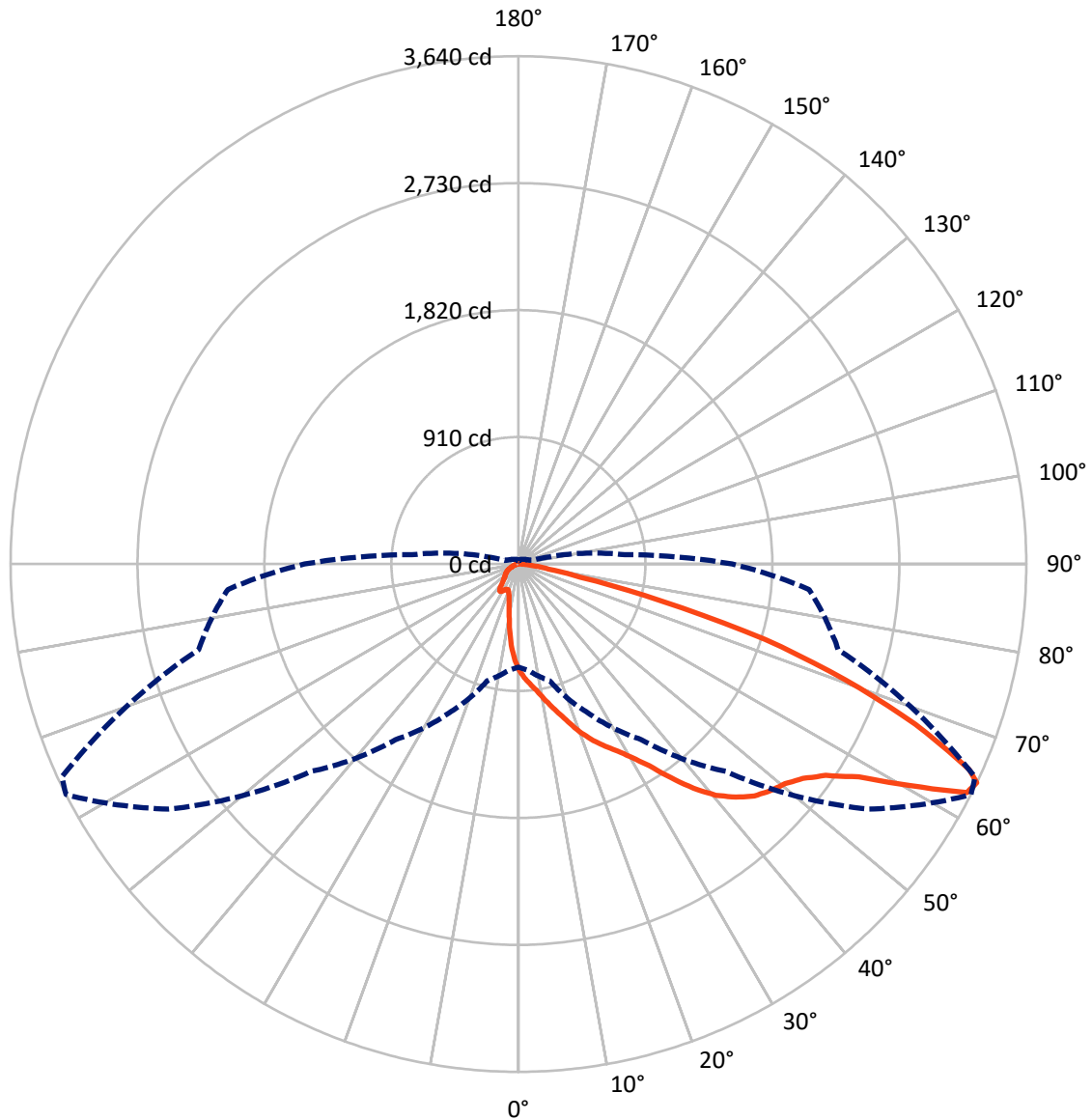
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.5 fc
 Type II - Short - N/A

REPORT NUMBER: P1458027
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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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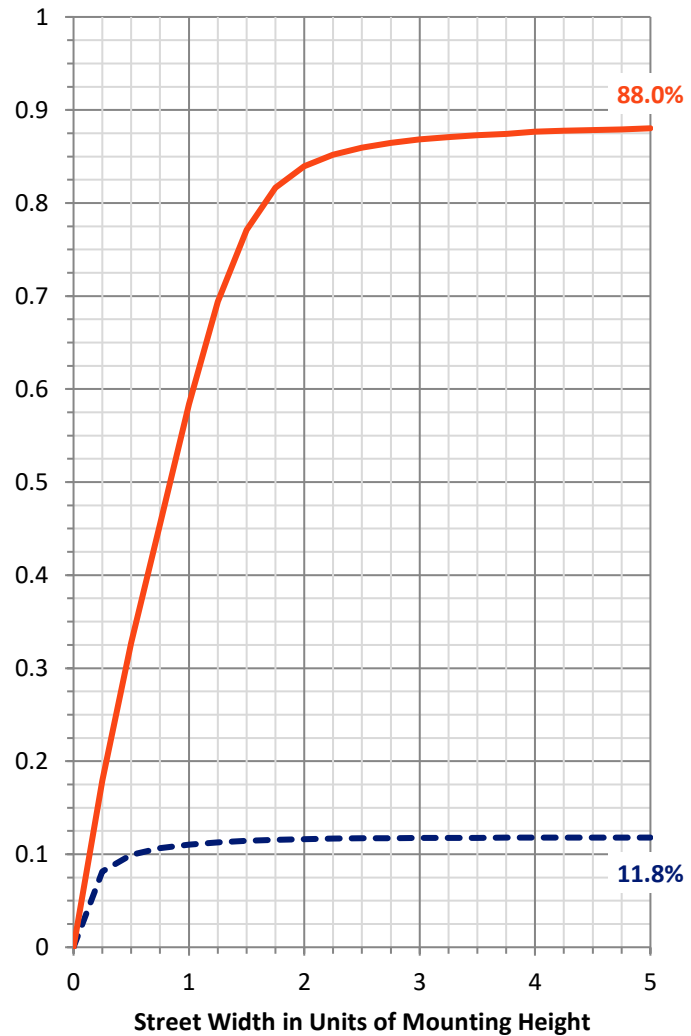
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 558.8 | 0.0 | 558.8 |
| | % Fixture | 11.9 | 0.0 | 11.9 |
| Street Side | Lumens | 4150.3 | 0.0 | 4150.3 |
| | % Fixture | 88.1 | 0.0 | 88.1 |
| Total | Lumens | 4709.1 | 0.0 | 4709.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.1 | 1.4 |
| 10°-20° | 180.2 | 3.8 |
| 20°-30° | 320.9 | 6.8 |
| 30°-40° | 612.9 | 13.0 |
| 40°-50° | 1016.0 | 21.6 |
| 50°-60° | 1266.4 | 26.9 |
| 60°-70° | 944.3 | 20.1 |
| 70°-80° | 270.8 | 5.8 |
| 80°-90° | 33.5 | 0.7 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 4709.1 | 100.0 |
| 0°-180° | 4709.1 | 100.0 |



--- HS — SS

REPORT NUMBER: P1458027

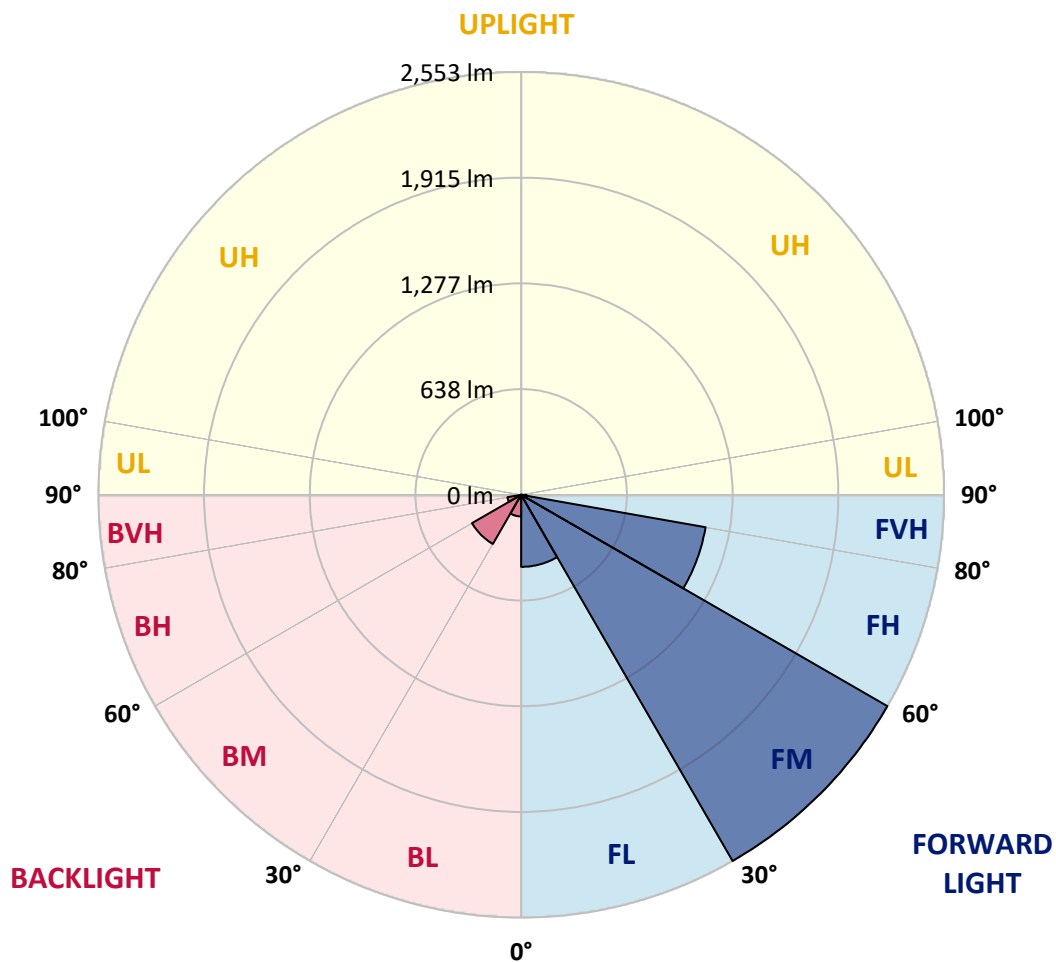
CATALOG NUMBER: GLAN-SB2A-940-U-T2LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 434.8 | 9.2 | | | |
| FM | (30°-60°) | 2553.0 | 54.2 | | | |
| FH | (60°-80°) | 1130.6 | 24.0 | | | G1/1800 |
| FVH | (80°-90°) | 31.8 | 0.7 | | | G1/100 |
| BL | (0°-30°) | 130.4 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 342.3 | 7.3 | B1/1000 | | |
| BH | (60°-80°) | 84.5 | 1.8 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.6 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P1458027

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 |
| 2.5° | 853.2 | 850.4 | 847.6 | 843.3 | 837.7 | 832.0 | 825.0 | 815.1 | 810.9 | 796.7 | 779.8 |
| 5° | 897.0 | 897.0 | 895.6 | 892.8 | 890.0 | 884.3 | 875.8 | 863.1 | 857.5 | 837.7 | 808.0 |
| 7.5° | 908.3 | 909.7 | 914.0 | 919.6 | 928.1 | 926.7 | 926.7 | 912.6 | 909.7 | 888.5 | 849.0 |
| 10° | 888.5 | 890.0 | 901.3 | 916.8 | 942.2 | 966.2 | 983.2 | 974.7 | 970.5 | 949.3 | 899.8 |
| 12.5° | 860.3 | 860.3 | 878.7 | 902.7 | 942.2 | 987.4 | 1036.9 | 1045.4 | 1046.8 | 1022.7 | 963.4 |
| 15° | 786.8 | 789.7 | 819.3 | 867.4 | 932.3 | 1003.0 | 1086.3 | 1118.8 | 1127.3 | 1111.7 | 1041.1 |
| 17.5° | 689.4 | 692.2 | 721.9 | 786.8 | 884.3 | 1003.0 | 1128.7 | 1203.6 | 1214.9 | 1217.7 | 1140.0 |
| 20° | 648.4 | 648.4 | 665.4 | 714.8 | 816.5 | 976.1 | 1154.1 | 1294.0 | 1319.4 | 1350.5 | 1248.8 |
| 22.5° | 654.1 | 654.1 | 663.9 | 692.2 | 774.1 | 939.4 | 1169.7 | 1374.5 | 1426.8 | 1505.9 | 1388.6 |
| 25° | 685.1 | 685.1 | 693.6 | 712.0 | 778.4 | 933.8 | 1199.3 | 1446.5 | 1529.9 | 1679.6 | 1548.2 |
| 27.5° | 734.6 | 733.2 | 740.2 | 758.6 | 819.3 | 960.6 | 1248.8 | 1518.6 | 1611.8 | 1874.6 | 1731.9 |
| 30° | 806.6 | 802.4 | 805.2 | 826.4 | 885.7 | 1022.7 | 1320.8 | 1610.4 | 1705.1 | 2087.9 | 1935.3 |
| 32.5° | 973.3 | 971.9 | 930.9 | 919.6 | 983.2 | 1123.0 | 1419.7 | 1724.8 | 1830.8 | 2313.9 | 2144.4 |
| 35° | 1274.2 | 1294.0 | 1236.1 | 1087.7 | 1100.4 | 1257.2 | 1561.0 | 1880.2 | 1977.7 | 2554.0 | 2371.8 |
| 37.5° | 1579.3 | 1579.3 | 1555.3 | 1380.1 | 1291.2 | 1405.6 | 1713.5 | 2039.8 | 2141.6 | 2747.6 | 2590.8 |
| 40° | 1820.9 | 1833.6 | 1805.3 | 1674.0 | 1558.1 | 1575.1 | 1866.1 | 2179.7 | 2272.9 | 2866.2 | 2746.2 |
| 42.5° | 2000.3 | 1997.5 | 1986.2 | 1900.0 | 1835.0 | 1796.9 | 2004.5 | 2284.2 | 2373.2 | 2927.0 | 2843.6 |
| 45° | 2193.8 | 2193.8 | 2178.3 | 2107.7 | 2054.0 | 2021.5 | 2107.7 | 2371.8 | 2465.1 | 2963.7 | 2904.4 |
| 47.5° | 2395.8 | 2393.0 | 2377.5 | 2299.8 | 2241.9 | 2193.8 | 2212.2 | 2428.3 | 2521.6 | 2939.7 | 2914.3 |
| 50° | 2445.3 | 2442.4 | 2477.8 | 2480.6 | 2428.3 | 2336.5 | 2295.5 | 2476.4 | 2558.3 | 2941.1 | 2945.3 |
| 52.5° | 2387.4 | 2404.3 | 2456.6 | 2520.1 | 2579.5 | 2483.4 | 2384.5 | 2552.6 | 2637.4 | 2980.7 | 3023.0 |
| 55° | 2243.3 | 2250.3 | 2350.6 | 2452.3 | 2590.8 | 2624.7 | 2527.2 | 2674.1 | 2749.0 | 3018.8 | 3092.3 |
| 57.5° | 1974.9 | 2001.7 | 2109.1 | 2285.6 | 2496.1 | 2637.4 | 2775.8 | 2877.5 | 2934.0 | 3034.3 | 3054.1 |
| 60° | 1490.3 | 1504.5 | 1737.5 | 1966.4 | 2299.8 | 2535.7 | 3007.5 | 3222.2 | 3215.2 | 2859.2 | 2787.1 |
| 62.5° | 906.9 | 919.6 | 1086.3 | 1449.4 | 1868.9 | 2323.8 | 3085.2 | 3607.9 | 3569.7 | 2563.9 | 2346.4 |
| 64° | 738.8 | 762.8 | 865.9 | 1176.7 | 1536.9 | 2102.0 | 3062.6 | 3640.4 | 3610.7 | 2373.2 | 2090.7 |
| 65° | 631.4 | 663.9 | 769.9 | 1021.3 | 1306.7 | 1863.3 | 3000.4 | 3550.0 | 3530.2 | 2257.4 | 1878.8 |
| 67.5° | 397.0 | 412.5 | 569.3 | 793.9 | 899.8 | 1192.3 | 2579.5 | 3069.7 | 3105.0 | 2011.6 | 1385.8 |
| 70° | 295.2 | 302.3 | 391.3 | 614.5 | 702.1 | 693.6 | 1771.4 | 2486.2 | 2494.7 | 1609.0 | 836.3 |
| 72.5° | 214.7 | 216.1 | 274.1 | 454.9 | 549.5 | 473.2 | 933.8 | 1847.7 | 1787.0 | 942.2 | 456.3 |
| 75° | 142.7 | 148.3 | 192.1 | 320.7 | 428.0 | 347.5 | 425.2 | 1052.4 | 1034.1 | 460.5 | 261.3 |
| 77.5° | 104.5 | 105.9 | 130.0 | 214.7 | 336.2 | 255.7 | 257.1 | 453.5 | 467.6 | 274.1 | 165.3 |
| 80° | 59.3 | 62.2 | 84.8 | 131.4 | 219.0 | 175.2 | 144.1 | 219.0 | 251.4 | 186.5 | 110.2 |
| 82.5° | 35.3 | 38.1 | 60.7 | 86.2 | 149.7 | 72.0 | 73.5 | 120.1 | 149.7 | 134.2 | 59.3 |
| 85° | 21.2 | 22.6 | 38.1 | 46.6 | 89.0 | 48.0 | 26.8 | 59.3 | 77.7 | 79.1 | 32.5 |
| 87.5° | 14.1 | 14.1 | 21.2 | 19.8 | 25.4 | 22.6 | 11.3 | 15.5 | 19.8 | 26.8 | 12.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P1458027

CATALOG NUMBER: GLAN-SB2A-940-U-T2LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 | 761.4 |
| 2.5° | 765.6 | 757.2 | 731.7 | 697.8 | 666.8 | 642.7 | 613.1 | 593.3 | 574.9 | 574.9 | 559.4 |
| 5° | 784.0 | 761.4 | 699.3 | 621.6 | 538.2 | 459.1 | 408.3 | 351.7 | 333.4 | 317.8 | 320.7 |
| 7.5° | 815.1 | 774.1 | 663.9 | 524.1 | 391.3 | 306.5 | 250.0 | 224.6 | 213.3 | 206.2 | 207.7 |
| 10° | 853.2 | 796.7 | 621.6 | 425.2 | 288.2 | 224.6 | 197.8 | 187.9 | 183.6 | 182.2 | 182.2 |
| 12.5° | 905.5 | 823.6 | 579.2 | 341.9 | 227.4 | 193.5 | 179.4 | 173.8 | 169.5 | 166.7 | 166.7 |
| 15° | 967.7 | 857.5 | 529.7 | 281.1 | 199.2 | 178.0 | 166.7 | 161.0 | 155.4 | 154.0 | 154.0 |
| 17.5° | 1046.8 | 892.8 | 485.9 | 241.6 | 185.1 | 166.7 | 155.4 | 148.3 | 144.1 | 142.7 | 142.7 |
| 20° | 1134.3 | 936.6 | 442.2 | 219.0 | 175.2 | 155.4 | 144.1 | 138.4 | 134.2 | 131.4 | 132.8 |
| 22.5° | 1245.9 | 991.7 | 413.9 | 207.7 | 166.7 | 145.5 | 134.2 | 128.5 | 124.3 | 121.5 | 122.9 |
| 25° | 1368.8 | 1060.9 | 398.4 | 207.7 | 161.0 | 138.4 | 125.7 | 120.1 | 115.8 | 113.0 | 113.0 |
| 27.5° | 1518.6 | 1138.6 | 399.8 | 216.1 | 159.6 | 132.8 | 118.7 | 113.0 | 108.8 | 104.5 | 104.5 |
| 30° | 1683.9 | 1230.4 | 415.3 | 231.7 | 162.5 | 127.1 | 113.0 | 104.5 | 101.7 | 97.5 | 97.5 |
| 32.5° | 1859.0 | 1336.4 | 454.9 | 251.4 | 159.6 | 120.1 | 104.5 | 97.5 | 93.2 | 90.4 | 90.4 |
| 35° | 2044.1 | 1456.4 | 504.3 | 259.9 | 145.5 | 110.2 | 97.5 | 90.4 | 87.6 | 86.2 | 84.8 |
| 37.5° | 2220.7 | 1561.0 | 531.2 | 243.0 | 127.1 | 101.7 | 89.0 | 81.9 | 80.5 | 77.7 | 77.7 |
| 40° | 2357.7 | 1647.1 | 515.6 | 207.7 | 117.2 | 93.2 | 81.9 | 74.9 | 72.0 | 69.2 | 69.2 |
| 42.5° | 2438.2 | 1678.2 | 459.1 | 176.6 | 110.2 | 84.8 | 74.9 | 67.8 | 65.0 | 63.6 | 63.6 |
| 45° | 2484.8 | 1674.0 | 392.7 | 158.2 | 103.1 | 77.7 | 67.8 | 63.6 | 59.3 | 57.9 | 56.5 |
| 47.5° | 2483.4 | 1630.2 | 344.7 | 142.7 | 96.1 | 72.0 | 63.6 | 59.3 | 55.1 | 53.7 | 53.7 |
| 50° | 2473.5 | 1565.2 | 291.0 | 131.4 | 90.4 | 67.8 | 59.3 | 56.5 | 52.3 | 50.9 | 49.4 |
| 52.5° | 2497.5 | 1528.5 | 243.0 | 124.3 | 83.3 | 65.0 | 57.9 | 53.7 | 48.0 | 46.6 | 46.6 |
| 55° | 2527.2 | 1507.3 | 194.9 | 117.2 | 77.7 | 63.6 | 55.1 | 50.9 | 45.2 | 43.8 | 43.8 |
| 57.5° | 2441.0 | 1426.8 | 161.0 | 105.9 | 70.6 | 60.7 | 52.3 | 49.4 | 43.8 | 39.6 | 39.6 |
| 60° | 2169.8 | 1179.6 | 132.8 | 93.2 | 65.0 | 56.5 | 49.4 | 45.2 | 39.6 | 33.9 | 33.9 |
| 62.5° | 1764.4 | 899.8 | 110.2 | 79.1 | 60.7 | 52.3 | 45.2 | 41.0 | 33.9 | 26.8 | 26.8 |
| 64° | 1532.7 | 764.2 | 98.9 | 69.2 | 57.9 | 48.0 | 41.0 | 36.7 | 29.7 | 22.6 | 21.2 |
| 65° | 1374.5 | 675.2 | 91.8 | 65.0 | 56.5 | 45.2 | 39.6 | 35.3 | 26.8 | 21.2 | 19.8 |
| 67.5° | 967.7 | 453.5 | 73.5 | 53.7 | 49.4 | 38.1 | 33.9 | 29.7 | 24.0 | 18.4 | 17.0 |
| 70° | 563.6 | 257.1 | 57.9 | 45.2 | 38.1 | 29.7 | 28.3 | 26.8 | 21.2 | 14.1 | 14.1 |
| 72.5° | 306.5 | 128.5 | 43.8 | 36.7 | 29.7 | 21.2 | 24.0 | 21.2 | 17.0 | 11.3 | 9.9 |
| 75° | 187.9 | 79.1 | 32.5 | 26.8 | 19.8 | 15.5 | 18.4 | 15.5 | 9.9 | 7.1 | 5.7 |
| 77.5° | 125.7 | 50.9 | 24.0 | 18.4 | 12.7 | 9.9 | 12.7 | 8.5 | 4.2 | 1.4 | 1.4 |
| 80° | 77.7 | 35.3 | 15.5 | 11.3 | 7.1 | 4.2 | 2.8 | 1.4 | 1.4 | 0.0 | 0.0 |
| 82.5° | 33.9 | 22.6 | 8.5 | 5.7 | 2.8 | 1.4 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 18.4 | 7.1 | 2.8 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.7 | 2.8 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-16

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-940-U-5WQ

Data in this report applies to families of products including GSS-SB1A-940-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-16
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-940-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 90 CRI 4000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3856
 CIE u': 0.2261
 CIE v': 0.5084
 Duv: 0.0032
 CIE x: 0.3896
 CIE y: 0.3894
 CIE z: 0.2211
 Peak Wavelength (nm): 614
 Dominant Wavelength (nm): 578
 Purity: 33.77304
 Rf: 91.8
 Rg: 98.4

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 92.1 | | |
| R1: | 91.8 | R9: | 60.7 |
| R2: | 94.1 | R10: | 85.2 |
| R3: | 95.3 | R11: | 92.4 |
| R4: | 92.8 | R12: | 74.5 |
| R5: | 91.0 | R13: | 92.3 |
| R6: | 91.6 | R14: | 97.0 |
| R7: | 95.0 | R15: | 88.5 |
| R8: | 85.2 | | |



Test Conditions

Stabilization Time: 23M
 Operation Time: 1H 23M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-16

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

REPORT NUMBER: SP1-2407-184-16

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



CCT = 3856K
 CIE x = 0.3896
 CIE y = 0.3894
 Duv = 0.0032

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-16

Photopic Flux vs. Wavelength



Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|
| 360 | 0 | NR | 490 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-16

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.72

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-16

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.52

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

Summary

$R_f = 91.8$
 $R_g = 98.4$
 $CIE R_a = 92.1$
 $R_9 = 60.7$



Color Vector Graphics

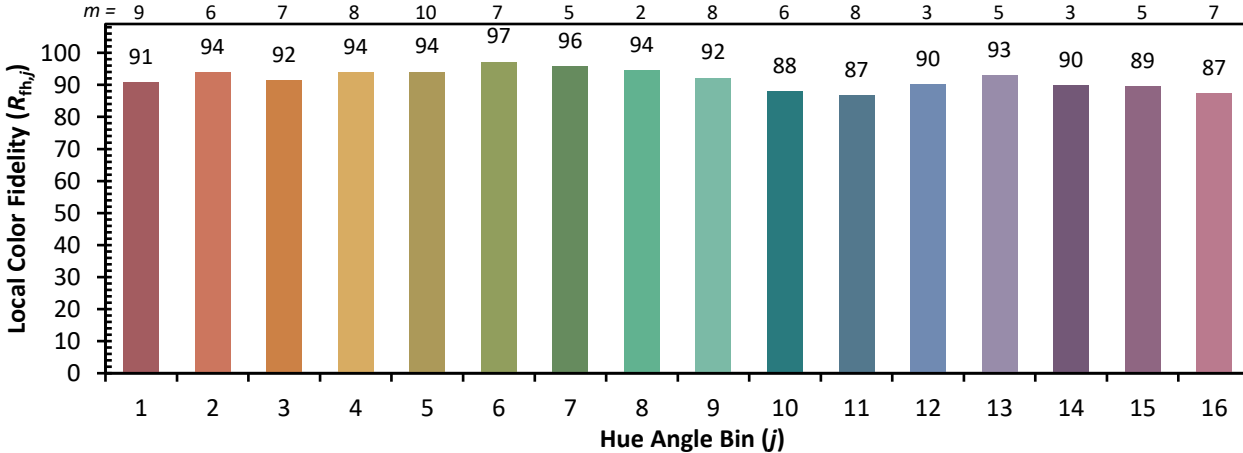


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 94 | CES51 = 96 | CES76 = 87 |
| CES02 = 62 | CES27 = 91 | CES52 = 98 | CES77 = 90 |
| CES03 = 31 | CES28 = 96 | CES53 = 95 | CES78 = 84 |
| CES04 = 69 | CES29 = 96 | CES54 = 94 | CES79 = 96 |
| CES05 = 49 | CES30 = 93 | CES55 = 92 | CES80 = 94 |
| CES06 = 50 | CES31 = 97 | CES56 = 93 | CES81 = 89 |
| CES07 = 42 | CES32 = 92 | CES57 = 92 | CES82 = 97 |
| CES08 = 41 | CES33 = 99 | CES58 = 92 | CES83 = 98 |
| CES09 = 29 | CES34 = 94 | CES59 = 96 | CES84 = 94 |
| CES10 = 74 | CES35 = 96 | CES60 = 93 | CES85 = 85 |
| CES11 = 57 | CES36 = 82 | CES61 = 92 | CES86 = 88 |
| CES12 = 63 | CES37 = 95 | CES62 = 87 | CES87 = 92 |
| CES13 = 43 | CES38 = 88 | CES63 = 92 | CES88 = 96 |
| CES14 = 74 | CES39 = 99 | CES64 = 89 | CES89 = 87 |
| CES15 = 71 | CES40 = 98 | CES65 = 88 | CES90 = 96 |
| CES16 = 47 | CES41 = 97 | CES66 = 87 | CES91 = 74 |
| CES17 = 49 | CES42 = 96 | CES67 = 86 | CES92 = 80 |
| CES18 = 56 | CES43 = 96 | CES68 = 88 | CES93 = 88 |
| CES19 = 71 | CES44 = 99 | CES69 = 89 | CES94 = 82 |
| CES20 = 66 | CES45 = 98 | CES70 = 86 | CES95 = 83 |
| CES21 = 85 | CES46 = 97 | CES71 = 81 | CES96 = 92 |
| CES22 = 78 | CES47 = 97 | CES72 = 94 | CES97 = 95 |
| CES23 = 91 | CES48 = 91 | CES73 = 81 | CES98 = 94 |
| CES24 = 90 | CES49 = 96 | CES74 = 93 | CES99 = 91 |
| CES25 = 71 | CES50 = 97 | CES75 = 83 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)